

IAP6 Rec'd PCT/PTO 23 JAN 2006

SEQUENCE LISTING

<110> SIMMONS, ANTHONY
CHEN, JIANMIN

<120> COMPOSITIONS AND METHODS FOR HERPES SIMPLEX PROPHYLAXIS
AND TREATMENT

<130> UTSG:263US

<140> UNKNOWN

<141> 2006-01-23

<150> PCT/US2004/024013

<151> 2004-07-26

<150> 60/489,984

<151> 2003-07-25

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<170> PatentIn Ver. 2.1

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<223> Description of Artificial Sequence: Synthetic
Primer

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<400> 32
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35 40 45
Gly Gly Pro Ala Thr Pro Ala Pro Pro Ala Pro Gly Ala Pro Pro Thr
50 55 60
Gly Asp Pro Lys Pro Lys Lys Asn Arg Lys Pro Lys Pro Pro Lys Pro
65 70 75 80
Pro Arg Pro Ala Gly Asp Asn Ala Thr Val Ala Ala Gly His Ala Thr
85 90 95
Leu Arg Glu His Leu Arg Asp Ile Lys Ala Glu Asn Thr Asp Ala Asn
100 105 110
Phe Tyr Val Cys Pro Pro Pro Thr Gly Ala Thr Val Val Gln Phe Glu
115 120 125
Gln Pro Arg Arg Cys Pro Thr Arg Pro Glu Gly Gln Asn Tyr Thr Glu
130 135 140
Gly Ile Ala Val Val Phe Lys Glu Asn Ile Ala Pro Tyr Lys Phe Lys
145 150 155 160
Ala Thr Met Tyr Tyr Lys Asp Val Thr Val Ser Gln Val Trp Phe Gly

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Pro	Phe	Glu 195	Glu	Val	Ile	Asp	Lys 200	Ile	Asn	Ala	Lys	Gly 205	Val	Cys	Arg		
Ser	Thr 210	Ala	Lys	Tyr	Val	Arg 215	Asn	Asn	Leu	Glu	Thr 220	Thr	Ala	Phe	His		
Arg 225	Asp	Asp	His	Glu	Thr 230	Asp	Met	Glu	Leu	Lys 235	Pro	Ala	Asn	Ala	Ala 240		
Thr	Arg	Thr	Ser	Arg 245	Gly	Trp	His	Thr	Thr 250	Asp	Leu	Lys	Tyr	Asn 255	Pro		
Ser	Arg	Val	Glu 260	Ala	Phe	His	Arg	Tyr 265	Gly	Thr	Thr	Val	Asn 270	Cys	Ile		
Val	Glu	Glu 275	Val	Asp	Ala	Arg	Ser	Val	Tyr	Pro	Tyr	Asp 285	Glu	Phe	Val		
Leu 290	Ala	Thr	Gly	Asp	Phe	Val 295	Tyr	Met	Ser	Pro	Phe 300	Tyr	Gly	Tyr	Arg		
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Ser	Phe	Met	Ser	Asn	Pro	Phe	Gly	Ala	Leu	Ala	Val	Gly	Leu	Leu	Val		
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 Gly Asp Phe Asp Glu Ala Lys Leu Ala Glu Ala Arg Glu Met Ile Arg
 835 840 845
 Tyr Met Ala Leu Val Ser Ala Met Glu Arg Thr Glu His Lys Ala Lys
 850 855 860
 Lys Lys Gly Thr Ser Ala Leu Leu Ser Ala Lys Val Thr Asp Met Val
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 Met Arg Lys Arg Arg Asn Thr Asn Tyr Thr Gln Val Pro Asn Lys Asp
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 Gly Asp Ala Asp Glu Asp Asp Leu
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<210> 34
 <211> 904
 <212> PRT
 <213> human herpesvirus 2

<400> 34
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 Arg Pro Pro Pro Val Pro Ser Pro Ala Thr Thr Lys Ala Arg Lys Arg
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 Lys Thr Lys Lys Pro Pro Lys Arg Pro Glu Ala Thr Pro Pro Pro Asp
 65 70 75 80
 Ala Asn Ala Thr Val Ala Ala Gly His Ala Thr Leu Arg Ala His Leu
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 Arg Glu Ile Lys Val Glu Asn Ala Asp Ala Gln Phe Tyr Val Cys Pro
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 Pro Pro Thr Gly Ala Thr Val Val Gln Phe Glu Gln Pro Arg Arg Cys
 115 120 125
 Pro Thr Arg Pro Glu Gly Gln Asn Tyr Thr Glu Gly Ile Ala Val Val
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 Phe Lys Glu Asn Ile Ala Pro Tyr Lys Phe Lys Ala Thr Met Tyr Tyr
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 Lys Asp Val Thr Val Ser Gln Val Trp Phe Gly His Arg Tyr Ser Gln
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 Phe Met Gly Ile Phe Glu Asp Arg Ala Pro Val Pro Phe Glu Glu Val
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Phe	His	Arg	Tyr	Gly	Thr	Thr	Val	Asn	Cys	Ile	Val	Glu	Glu	Val	Asp	260	265	270
Ala	Arg	Ser	Val	Tyr	Pro	Tyr	Asp	Glu	Phe	Val	Leu	Ala	Thr	Gly	Asp	275	280	285
Phe	Val	Tyr	Met	Ser	Pro	Phe	Tyr	Gly	Tyr	Arg	Glu	Gly	Ser	His	Thr	290	295	300
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Thr	Met	Leu	Glu	Asp	His	Glu	Phe	Val	Pro	Leu	Glu	Val	Tyr	Thr	Arg	
675					680					685						
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705					710					715					720	
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755					760					765						
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785					790					795					800	
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Tyr Met Ala Leu Val Ser Ala Met Glu Arg Thr Glu His Lys Ala Arg
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 Lys Lys Gly Thr Ser Ala Leu Leu Ser Ser Lys Val Thr Asn Met Val
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<210> 35
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 <213> human herpesvirus 1

<400> 35
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 35 40 45
 Val Leu Asp Gln Leu Thr Asp Pro Pro Gly Val Arg Arg Val Tyr His
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 Ile Gln Ala Gly Leu Pro Asp Pro Phe Gln Pro Pro Ser Leu Pro Ile
 65 70 75 80
 Thr Val Tyr Tyr Ala Val Leu Gly Arg Ala Cys Arg Ser Val Leu Leu
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 Val Arg Lys Gln Pro Tyr Asn Leu Thr Ile Ala Trp Phe Arg Met Gly
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 Gly Asn Cys Ala Ile Pro Ile Thr Val Met Glu Tyr Thr Glu Cys Ser
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 Asn Tyr Tyr Asp Ser Phe Ser Ala Val Ser Glu Asp Asn Leu Gly Phe
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 Leu Met His Ala Pro Ala Phe Glu Thr Ala Gly Thr Tyr Leu Arg Leu
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 Val Lys Ile Asn Asp Trp Thr Glu Ile Thr Gln Phe Ile Leu Glu His
 195 200 205
 Arg Ala Lys Gly Ser Cys Lys Tyr Ala Leu Pro Leu Arg Ile Pro Pro
 210 215 220

Ser Ala Cys Leu Ser Pro Gln Ala Tyr Gln Gln Gly Val Thr Val Asp
 225 230 235 240
 Ser Ile Gly Met Leu Pro Arg Phe Ile Pro Glu Asn Gln Arg Thr Val
 245 250 255
 Ala Val Tyr Ser Leu Lys Ile Ala Gly Trp His Gly Pro Lys Ala Pro
 260 265 270
 Tyr Thr Ser Thr Leu Leu Pro Pro Glu Leu Ser Glu Thr Pro Asn Ala
 275 280 285
 Thr Gln Pro Glu Leu Ala Pro Glu Asp Pro Glu Asp Ser Ala Leu Leu
 290 295 300
 Glu Asp Pro Val Gly Thr Val Ala Pro Gln Ile Pro Pro Asn Trp His
 305 310 315 320
 Ile Pro Ser Ile Gln Asp Ala Ala Thr Pro Tyr His Pro Pro Ala Thr
 325 330 335
 Pro Asn Asn Met Gly Leu Ile Ala Gly Ala Val Gly Gly Ser Leu Leu
 340 345 350
 Ala Ala Leu Val Ile Cys Gly Ile Val Tyr Trp Met Arg Arg His Thr
 355 360 365
 Gln Lys Ala Pro Lys Arg Ile Arg Leu Pro His Ile Arg Glu Asp Asp
 370 375 380
 Gln Pro Ser Ser His Gln Pro Leu Phe Tyr
 385 390

<210> 36
 <211> 393
 <212> PRT
 <213> human herpesvirus 2

<400> 36
 Met Gly Arg Leu Thr Ser Gly Val Gly Thr Ala Ala Leu Leu Val Val
 1 5 10 15
 Ala Val Gly Leu Arg Val Val Cys Ala Lys Tyr Ala Leu Ala Asp Pro
 20 25 30
 Ser Leu Lys Met Ala Asp Pro Asn Arg Phe Arg Gly Lys Asn Leu Pro
 35 40 45
 Val Leu Asp Gln Leu Thr Asp Pro Pro Gly Val Lys Arg Val Tyr His
 50 55 60
 Ile Gln Pro Ser Leu Glu Asp Pro Phe Gln Pro Pro Ser Ile Pro Ile
 65 70 75 80
 Thr Val Tyr Tyr Ala Val Leu Glu Arg Ala Cys Arg Ser Val Leu Leu
 85 90 95
 His Ala Pro Ser Glu Ala Pro Gln Ile Val Arg Gly Ala Ser Asp Glu
 100 105 110

Ala	Arg	Lys	His	Thr	Tyr	Asn	Leu	Thr	Ile	Ala	Trp	Tyr	Arg	Met	Gly	115	120	125	
Asp	Asn	Cys	Ala	Ile	Pro	Ile	Thr	Val	Met	Glu	Tyr	Thr	Glu	Cys	Pro	130	135	140	
Tyr	Asn	Lys	Ser	Leu	Gly	Val	Cys	Pro	Ile	Arg	Thr	Gln	Pro	Arg	Trp	145	150	155	160
Ser	Tyr	Tyr	Asp	Ser	Phe	Ser	Ala	Val	Ser	Glu	Asp	Asn	Leu	Gly	Phe	165	170	175	
Leu	Met	His	Ala	Pro	Ala	Phe	Glu	Thr	Ala	Gly	Thr	Tyr	Leu	Arg	Leu	180	185	190	
Val	Lys	Ile	Asn	Asp	Trp	Thr	Glu	Ile	Thr	Gln	Phe	Ile	Leu	Glu	His	195	200	205	
Arg	Ala	Arg	Ala	Ser	Cys	Lys	Tyr	Ala	Leu	Pro	Leu	Arg	Ile	Pro	Pro	210	215	220	
Ala	Ala	Cys	Leu	Thr	Ser	Lys	Ala	Tyr	Gln	Gln	Gly	Val	Thr	Val	Asp	225	230	235	240
Ser	Ile	Gly	Met	Leu	Pro	Arg	Phe	Ile	Pro	Glu	Asn	Gln	Arg	Thr	Val	245	250	255	
Ala	Leu	Tyr	Ser	Leu	Lys	Ile	Ala	Gly	Trp	His	Gly	Pro	Lys	Pro	Pro	260	265	270	
Tyr	Thr	Ser	Thr	Leu	Leu	Pro	Pro	Glu	Leu	Ser	Asp	Thr	Thr	Asn	Ala	275	280	285	
Thr	Gln	Pro	Glu	Leu	Val	Pro	Glu	Asp	Pro	Glu	Asp	Ser	Ala	Leu	Leu	290	295	300	
Glu	Asp	Pro	Ala	Gly	Thr	Val	Ser	Ser	Gln	Ile	Pro	Pro	Asn	Trp	His	305	310	315	320
Ile	Pro	Ser	Ile	Gln	Asp	Val	Ala	Pro	His	His	Ala	Pro	Ala	Ala	Pro	325	330	335	
Ser	Asn	Pro	Gly	Leu	Ile	Ile	Gly	Ala	Leu	Ala	Gly	Ser	Thr	Leu	Ala	340	345	350	
Val	Leu	Val	Ile	Gly	Gly	Ile	Ala	Phe	Trp	Val	Arg	Arg	Arg	Ala	Gln	355	360	365	
Met	Ala	Pro	Lys	Arg	Leu	Arg	Leu	Pro	His	Ile	Arg	Asp	Asp	Asp	Ala	370	375	380	
Pro	Pro	Ser	His	Gln	Pro	Leu	Phe	Tyr								385	390		